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Indicators Of pumping heart function in immature rats subjected to muscle training at different stages of postnatal development

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Abstract

This paper deals with the features of changes in the indicators of cardiac pump function of rats and their regulation mechanisms during systematic muscle training organized at an earlier stage of their development, i.e., since 14th day of birth. It was found for the first time ever that the indicators of pumping cardiac function in rats subjected to systematic muscle training from day 21 to 70 of birth undergo more substantial changes in the age range of 42 to 70 days. Whereas, the indicators of pumping cardiac function in animals subjected to muscle training from day 14 to 70 of birth changed largely in the age range of 14 to 42 days. Moreover, muscle training of rats started on day 14 of birth result in more pronounced changes in the regulation of pumping cardiac function than the muscle training started on day 21 of birth.

Keywords

Cardiac output, Heart rate, Immature rats, Muscle training, Regulation of pumping cardiac function, Stroke volume